

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
CARRIBEAN ENVIRONMENTAL PROTECTION DIVISION
CITY VIEW PLAZA II BUILDING, 7<sup>TH</sup> FLOOR
ROUTE 165 GUAYNABO, PUERTO RICO 00968

March 30, 2022

Mr. Edgardo Bermúdez
Executive Director
Compliance and Quality Control
Puerto Rico Aqueduct and Sewer Authority
P.O. Box 7066
San Juan, Puerto Rico 00916-9990

**Re:** Off-Site Inspection

Guanica Wastewater Treatment Plant NPDES Permit Number PR0020486

Dear Mr. Bermúdez:

On March 24, 2022, the United States Environmental Protection Agency (EPA) conducted an Off-Site Inspection at the above referenced Puerto Rico Aqueduct and Sewer Authority's (PRASA) Wastewater Treatment Plant (WWTP) located in Guanica, Puerto Rico. The inspection was conducted pursuant the authority contained in Section 308 of the Clean Water Act, 33 U.S.C. § 1251 et seq., 40 CFR § 122.41(a)(2), & 1, 2, 3, and in accordance with Agency wide acceptable guidance and procedures. PRASA was represented by Amalio Quiros, Plant Operator; Edgardo Jorge, Plant Operator; and Rosalia Torres, Environmental Compliance Specialist.

Enclosed you will find the inspection report. The report indicates the noncompliance items or deficiencies which should be corrected to ensure compliance with the Clean Water Act and the National Pollutant Discharge Elimination System ("NPDES") Permit. There are also certain areas of concern which are items that could be improved for better operation of the facility. Within ninety (90) calendar days of receipt of this letter, please respond with the actions that PRASA has taken or will take to address the deficiencies included in the attached Water Compliance Inspection Report.

Should you have any questions feel free to contact Miguel A. Batista, Environmental Engineer, at (787) 977-5823.

Sincerely,

Jaime A. Geliga Chief Municipal Water Program Branch Caribbean Environmental Protection Division

#### Enclosure

cc: Annette Feliberty, DNER (w/Enclosures) Lisby Pagán, PRASA Milmarie Medina, PRASA Iván López, PRASA

### **NPDES Inspection Report**

### **Off-Site Inspection**

Facility Name: Guanica WWTP NPDES Permit Number: PR0020486

Permit Status: Active (02/01/2008 – 01/31/2023)

Inspection Date: March 24, 2022

PRASA representative: Amalio Quiros, Plant Operator

Edgardo Jorge, Plant Operator

Rosalia Torres, Environmental Compliance Specialist

EPA Inspector: Miguel A. Batista, Environmental Engineer

#### I. <u>BACKGROUND</u>

An Off-Site Inspection was conducted on March 24, 2022, at the Guanica Wastewater Treatment Plant (WWTP). The inspection consisted of telephonic interview to discuss the purpose of the inspection and to request information about the facility, review the operational and maintenance conditions, and a closing interview to discuss preliminary findings.

#### II. FACILITY DESCRIPTION AND OPERATOR'S LICENCE STATUS

The Guanica WWTP is a secondary treatment plant. The facility consists of two treatment modules. One module is a 0.5 MGD activated sludge conventional package plant (Old Plant), and the second module is a 1.25 MGD Biological Nutrient Removal (BNR) treatment plant (New Plant). At the time of the CEI, the new plant was out of service. The old plant was in service.

At the time of the inspection, Mr. Amalio Quiros and Mr. Edgardo Jorge were acting as Plant Operators for the Guanica WWTP. Mr. Quiros has obtained the certification as a WWTP Operator Level IV, license # 2099, which expires on April 21, 2023. Mr. Jorge has obtained the certification # 2932 as a WWTP Level IV. Such certification expires on May 22, 2023.

### III. COMPLIANCE STATUS WITH CONSENT DECREE (CD)

As part of the Preventive Maintenance Program (PMP) minimum requirements required by the CD (CD 3:15-cv-02283-JAG, signed on September 15, 2015), the Guanica WWTP is implementing the program (Appendix U) with some deficiencies. PRASA must maintain all facility's equipment in very good operational conditions in order to comply with the NPDES Permit and CD's Operation and Maintenance Clauses.

## IV. <u>INSPECTION FINDINGS</u>

## **A.** Previous Observations:

Findings during the October 31, 2019 CEI	Status at the time of the Off-Site RI on April 29, 2021	Status at the time of the Off-Site Inspection on March 24, 2022
1. Degritter's were out of service.	Not corrected. Under rehabilitation project.	Not corrected. PMC-0-998022
2. The degritter's pipeline was corroded.	Not corrected. Under rehabilitation project.	Not corrected. PMC-0-998022
3. An air leak was detected at the Biological Nutrient Removal unit. (New Plant).		Not corrected. PMC-0-998022
4. Corrosion-related issues throughout the facility were observed as in previous inspections.	Not corrected. Under rehabilitation project.	Not corrected. PMC-0-998022

**B.** Equipment unit identified in poor operational conditions or not in service at the time of the EPA's CEI (October 31, 2019) are summarized in the following table:

	Equipment Unit (SAP #)	Date Reported Out of service	Work Order#	Type of Failure	RI Findings 04/29/2021	Status at the time of the Off-Site Inspection on March 24, 2022
1.	Pump/Motor Degritter # 1 (208765)	12/18/2017	10330755	Malfunction.	Not corrected. Under Capital Improvement Project.	Not corrected. PMC-0-998022
2.	Pump/Motor Degritter # 2 (208766)	05/29/2017	10455402	Malfunction.	Not corrected. Under Capital Improvement Project.	Not corrected. PMC-0-998022
3.	Motor Paddle Drive Degritter # 1 (1133663)	09/25/2019	10600572	Malfunction.	Not corrected. Under Capital Improvement Project.	Not corrected. PMC-0-998022
4.	Motor Paddle Drive Degritter # 2 (1133664)	09/25/2019	10600528	Malfunction.	Not corrected. Under Capital Improvement Project.	Not corrected. PMC-0-998022

C. Equipment units identified in poor operational conditions or not in service at the time of the EPA's RI (04/29/2021) are summarized in the following table:

Equipment Unit (SAP #)	Date Reported Out of service	Work Order#	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)	Status at the time of the Off-Site Inspection on March 24, 2022
1. Blower # 3 (original plant) (208951)	04/26/2021	10690859	Intermittent failure.	N/A	Corrected on 05/04/2021.
2. Blower # 2 (original plant) (208952)	04/20/2021	10690002	Oil.	N/A	Corrected on 05/04/2021.
3. Motor-Blower # 2 (original plant) (1135490)	04/20/2021	10690003	Squeaky noise.	N/A	Corrected on 05/04/2021.
<b>4.</b> Sump Spray Pump (original plant) (1143107)	04/12/2021	10689027	Pipeline corrosion.	Yes	Not corrected.
<b>5.</b> Degritter panel 1 (213031)	06/04/2020	10640413	CIP.	Yes	Not corrected. PMC-0-998022
6. Influent pump panel (new plant) (213036)	09/17/2019	10640560	Corrosion.	N/A	Corrected on 11/17/2021.
7. Sludge Belt Filter Press. (1107285)	04/07/2021	10681503	PLC.	N/A	Corrected on 03/11/2022.
8. Filter Press Sludge Pumps (1112964)	03/25/2021	10684601	Do not turn on automatic mode	N/A	Corrected on 08/01/2021.
9. Clarifier 2 Transmission (new plant) (209654)	03/16/2021	10686522	Oil leak.	N/A	Corrected on 10/25/2021.
<b>10.</b> Blower BNR # 2 (1136810)	04/07/2021	10688488	Pulleys.	N/A	Corrected on 12/21/2021.
11. Control Panel Sludge Recirculation Pumps (213040)	06/05/2020	Not Available	Panel malfunction.	Yes	Partially corrected on 07/17/2020. Waiting for test.
12. Interior illumination (No SAP #)	11/05/2019	10608245	Out of service.	Yes	Not corrected.
13. Exterior illumination (No SAP #)	11/05/2019	10608244	Out of service.	Yes	Not corrected.

Equipment Unit (SAP #)	Date Reported Out of service	Work Order#	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)	Status at the time of the Off-Site Inspection on March 24, 2022
<b>14.</b> Scum Pump Air Lift (No SAP #)	10/13/2020	10661193	Broken pipeline.	Yes	Not corrected.
<b>15.</b> Equalizer Pump 1 (208445)	06/05/2020	10640522	Out of operation.	Yes	Not corrected.
<b>16.</b> Chlorine Contact Chambers Valves # 2 and # 3 (No SAP #)	04/12/2021	10688976	Malfunction.	N/A	Corrected on 04/28/2021.
17. A/C Office and Laboratory (no SAP)	04/25/2021	10690455	Maintenance	N/A	Corrected on 07/21/2021.

<sup>\*</sup>Check when equipment has been out of service or operating with deficiency for more than 6 months.

**D.** Equipment and/or unit identified in poor operational conditions or not in service at the time of the Off-Site Inspection conducted on March 24, 2022, are summarized in the following table:

Equipment Unit/SAP #	Date Reported Out of service	Order#	Type of Failure	O & M Clauses deficiencies* (Yes / No)
1. Blower # 2 (original plant) (208952)	10/10/2021	10717573	Over amperage	No
2. Sludge Belt Filter Press (1107285)	03/22/2022	10741306	Does not turn on	No
<b>3.</b> Transmission Clarifier's Arm BNR # 1 (209653)	03/17/2021	10693637	Does not turn on automatic mode	Yes
<b>4.</b> Mixer BNR Anoxic # 5 (1140799)	06/16/2021	10697694	Pipe/Chain	Yes
<b>5.</b> Blower BNR # 3 (208946)	07/14/2021	10703166	Out of service	Yes
<b>6.</b> Blower BNR # 4 (208947)	09/07/2021	10712076	Oil leak	Yes

<sup>\*</sup>Check when equipment has been out of service or operating with deficiency for more than 6 months.

**E.** The plant's discharge exceeded the effluent limitation for some parameters from January/2021 until December/2021 as follows:

PARAMETER	DATE
Enterococci Geo Mean	July/2021
Enterococci %	August/2021

## V. <u>SAMPLING</u>

The effluent sample was evaluated at the discharge point (Point 001) for the parameters shown below at the time of the inspection:

Effluent Grab Sample Results			
Color	No.		
Grease	No.		
Oil Sheen	No.		
Foam	No.		
Floatable Solids	0.0 mL/L		
Turbidity	2.82 NTU		
Residual Chlorine	< 0.02 mg/L		
Temperature	27.0 °C		
Dissolved Oxygen	7.76 mg/L		
pH	7.41 S.U.		



Picture of the effluent sample taken and sent by PRASA at the time of the Off-Site Inspection conducted on 03/24/2022 for the Guanica WWTP.

# VI. <u>CONCLUSION</u>

The inspection revealed that there were operation units or equipment out of service or under repair.
Please note that Part C.5 of Attachment I of the permit requires the permittee to properly operate
and maintain all facilities and systems for collection and treatment (and related appurtenances)
which are installed or used to achieve compliance.

INSPECTOR SIGNATURE	
SUPERVISOR SIGNATURE	